

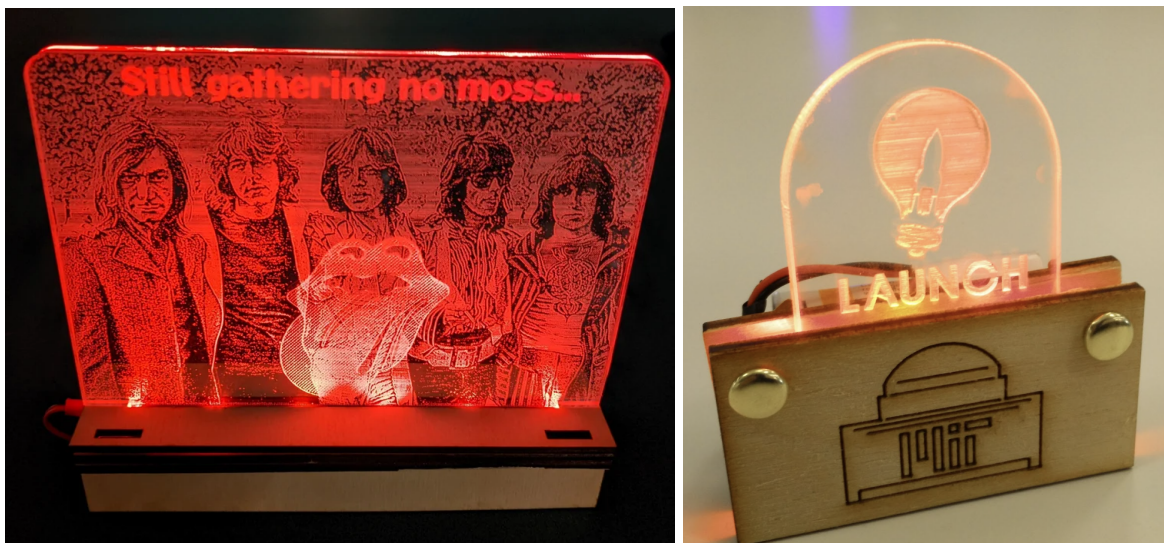
Light-Up Etched Acrylic Display

Shared by: K-12 Maker Lab at the MIT Edgerton Center

Specialized tools and materials used:	Experience level required:
LED strips - 12V, single color or RGB (not addressable LEDs / Neopixels), (such as https://www.amazon.com/gp/product/B01NATWJ49 - the 12V strips run on 9V)	Beginner
Soldering and wiring tools	Beginner/Intermediate
Laser cutter and - Birch plywood sheet, 1/8" thick - Clear Acrylic sheet, 1/8" thick (cast is preferable to extruded)	Beginner
Graphic design tools (like Google Slides, Vectr, Canva, Inkscape, etc.)	Beginner

Grade Level and Subject (of this example): 9th Grade Makerspace Intro

Topic/Content Standards (for this example): SEL Competency 1 (Self-Awareness)

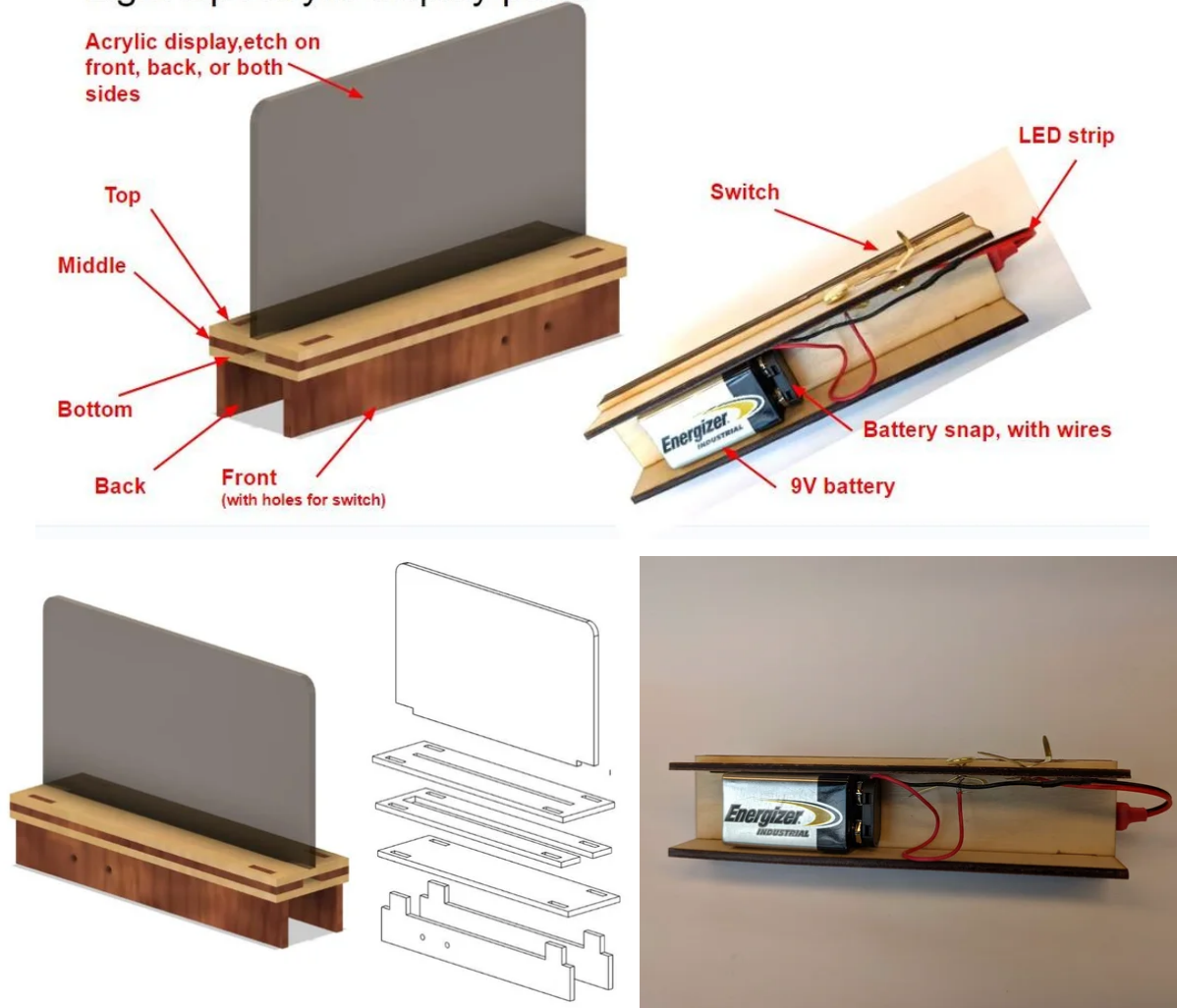


Summary of Project:

Express yourself with a light-up acrylic display! This inexpensive and easy project is a great starter project for a makerspace and will help new makers get familiar with simple electronics, image processing, and using the laser cutter.

Graphics can be created and edited in a number of programs, like Google Slides (slides.new), Canva (canva.com), or Vectr (vectr.com). The general process consists of selecting images and processing them for engraving with the laser, laser cutting the wooden base and acrylic graphic pieces, and finally assembling and creating the circuit. Detailed instructions, SVG base files ready for laser cutting, and more can be found through other K-12 Maker Lab resources. Check out our [Instructables](#) entry for this project, recorded [webinar](#) tutorial, or step by step [tutorial slides](#).

Light Up Acrylic display parts



Suggested resources

- [Instructable](#) written instructions from K-12 Maker Lab
- [Tutorial slides](#) from the K-12 Maker Lab
- [Live project webinar recording](#) from K-12 Maker Lab